

Preliminary Structural Project Report For Bridge Median Widening

Structures: 1F-195 & 3F-195; I-15 Farmington to Gordon Avenue



Project Manager: Charles Mace
Project Number: S-I15-7(253)329
PIN number: 5751
FiNet #:
FY: 2007

UDOT

Structures Division
Region 1

Prepared by
Chris Potter

January 2007

Reviewed by Structures Team: 2/1/2007

REPORT SUMMARY

Scope of Project:

1. Purpose of Report

This report presents a conceptual overview of a project to widen structures 1F-195 & 3F-195 in conjunction with a roadway project, adding 1-lane to the median of I-15 in each direction. It is intended to convey the need, scope, schedule, budget, and quality control process for the project.

2. Project Information

Region: 1 **Route No:** I-15 **Date:** January 2007

Project Name: I-15 Farmington to Gordon Avenue **R.P.:** 328.640/328.655

Project Number: S-I15-7(253)329 **PIN:** 5751 **CID:**

Project Design: Bridge: UDOT Structures Division;
Roadway: Region 1 Preconstruction

Project Mgr: Charles Mace

3. Plan:

The structural portion of this project involves widening in the median connecting the two bridges together and repairing substructure and/or superstructure damage.

4. Work Items to be completed:

The scope of this project includes the following:

- Widen Median Connecting Bridges
- Install Median Offset Barrier to Correct for Elevation Difference Between NB/SB
- Seismic Upgrades to Structures
- Extend Approach Slabs
- Tie-in Roadway (Included in Roadway)
- Half Width Pre-Cast Deck Panels

5. Work Items to be Deferred:

The roadway designers will address roadway and safety items beyond what is related to the bridge widening.

6. Design Exceptions:

No Design Exceptions are expected.

7. Maintenance Considerations:

Region 1 Maintenance Station 1424 should be included in the concept development.

8. Construction Considerations:

Construction easements and staging areas, night work, off peak work, A+B bidding, Rapid Deck Replacement Methods and Limitations of Operations should be considered. Impacts to I-15 must be minimized and 2-lanes in each direction must be maintained at all times. Coordination with the region Public Information Coordinator and local communities will be necessary.

9. **Risk Analysis:** (None anticipated at this time)
The greatest risk is associated with traffic control and delays.

10. **Development Process:**
- | | | |
|-----------------------------|---------------|------------|
| New or Major Reconstruction | <u> X </u> | (Widening) |
| Rehabilitation | <u> </u> | |
| Preservation | <u> </u> | |

Schedule of Project:

Refer to the overall Project Schedule.

Budget of Project:

- | | | |
|----|-----------------------------|---------------|
| 1. | Funding Source: | State Funds |
| 2. | Commission Approved Amount: | \$ 20,000,000 |
| 3. | Cost Estimate: | \$ 5,205,000 |

Median Widening

1F-195 & 3F-195; Kaysville Interchange MP 328.655				
Item	Quantity	Unit	Unit Cost	Total Cost
Structure Items				
Median Widening (Beams, Abutments, Deck, Bents, etc.) Approx. 188' x 50'	9400	SF		
Median Offset Barrier	1	LUMP		
Seismic Upgrades to Structures	1	LUMP		
Innovative Contracting	1	LUMP		
Roadway Items				
Roadway Items needed to tie bridge into roadway, approaches, etc.				Included in Roadway
Traffic Control				Included in Roadway
Mobilization				Included in Roadway
MOT				Included in Roadway
Public Information Services				Included in Roadway
Subtotal				
20% PE/CE				
30% Contingency				
Project Total				\$5,205,000.00

*** Structure Subtotal Includes:**

- 1) Approach Slabs (Match Existing)
- 2) Granular Backfill Borrow
- 3) Remove/Replace Concrete Slope Protection
- 4) Waterproofing Membrane (Overlap 1' with Existing Membrane)
- '06 Preservation: Deck Repair & New Overlay
- 5) Electrical Work for Bridge (Deck Underside Lighting)

LOCATION MAP



1F-195, 3F-195